

The NASA Star and Exoplanet Database

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On behalf of

The NStED Team

22 February 2008

The NStED Charter

- Curate scientific data related to exoplanets and potential host stars
- Facilitate scientific exploitation of these data sets
- Support target selection and science planning for future observations

The NStED Services

- Stellar Services

- Data related to relatively bright nearby stars
 - All known planet-hosting stars
- Query for individual stars or by stellar/planetary parameters
- Images and spectra

NStED Services:
 Search NStED for an Individual Star:

Search for Star

Examples: HD 105, HIP 171, HIP 3765
 Allowed object/catalog identifiers

Search NStED by Stellar Parameters

Search Exo-Planet Transit Survey TrES Data

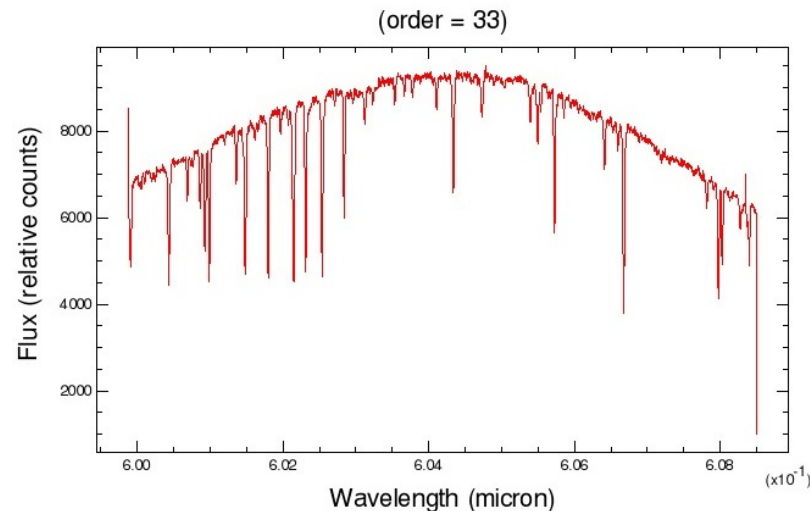
Search Exo-Planet Transit Survey Cluster Data

- Exoplanet Services

- Data related to known exoplanets
- Photometric light curves of transiting exoplanets
- Dedicated interface related to exo-planet transit surveys

Stellar Content for NStED

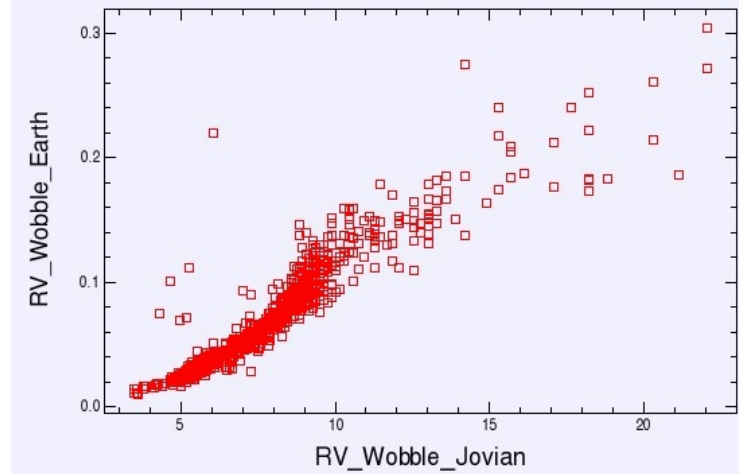
- Approximately 140,000 stars
- Associated data include:
 - Next 2000 (N2K) Stars template spectra
 - Coronagraphic images from Palomar
 - 2MASS image mosaics



Published Parameters		Derived Parameters	Associated Data
Position, Distances	Metallicity	Temperature	Images Spectra
Kinematics	Rotation	Luminosity	
Photometry, Colors	Activity	Radius	
Spectral type	Indicators	Mass	
Luminosity Class	Variability	LSR Space Motion	
	Multiplicity		

Exoplanet Content for NStED

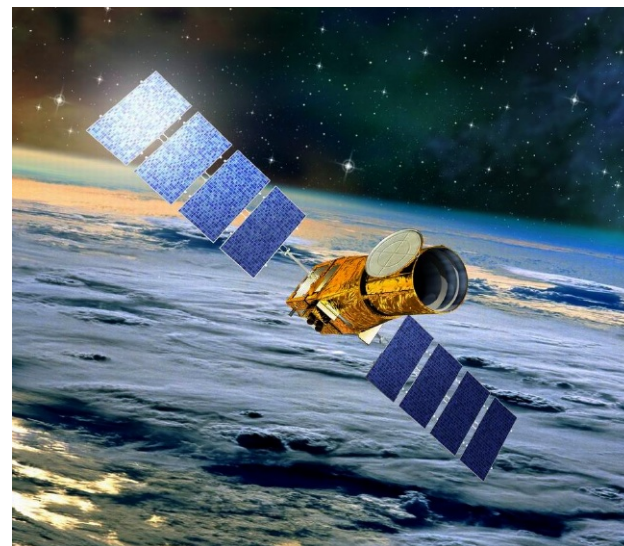
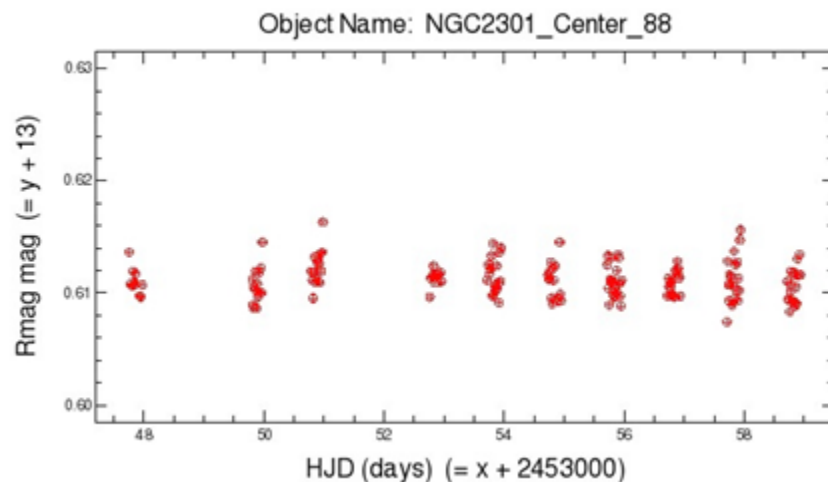
- Published parameters for known exoplanets
- Derived parameters for all the dwarf stars
- Associated data
 - For both known exoplanet hosting stars and others stars surveyed
 - light curves from published data in the literature



Published Parameters	Predicted Parameters	Associated Data
Number of Planets Planetary Mass Orbital Period Orbital semi-major axis Orbital Eccentricity Link to Exoplanet Encyclopedia Entry	Habitable Zone Astrometric Wobble Radial Velocity Wobble Earth V magnitude Earth 10 μ m flux density	High Contrast Images Light curves of Transiting Systems

Exoplanet Transit Survey Service Content

- Initial release of service
 - Precision photometric light curves
 - ~150,000 stars
 - Magnitudes and light curve parameters
 - TrES Observations of Kepler Field
 - Surveys of Clusters
 - NGC 2301, NGC 3201, M10, M12
- In contact with additional groups
 - **CoRoT (ground-based and mission data)**
 - Vulcan (Observations of the Kepler Field)
 - MOST
 - Explore/OC
 - BOKS
 - MONITOR
- Light curve visualization



Release Date

- NStED Version 2.0 will be publicly available 31 March 2008

<http://nsted.ipac.caltech.edu>